

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 11, 21, 38, 49, 47, 49, 51, 62 and 71. Following entry of the amendments in this Amendment, the pending claims in the present application read as follows:

1 1. (Currently amended): An electronic bill presentment and payment system for
2 presenting and paying bills via the Internet, said system comprising:
3 parsing functionality which is adapted to parse billing data from a plurality
4 of billers using rules of conversion according to which said parsing functionality is
5 programmed, corresponding to a plurality of data types, and to provide relevant
6 information, said rules of conversion being a rules application process;
7 a common document model processing functionality adapted to transform
8 said relevant information parsed from all of said plurality of billers into a common
9 document model, wherein said common document model is adapted to
10 accommodate said relevant information from said plurality of billers and
11 according to said plurality of data types, wherein each of said plurality of billers
12 has a subset of data and attributes accommodated by said common document
13 model;
14 a database adapted to store said transformed information from
15 said common document model processing functionality; and
16 presentation functionality adapted to retrieve information from said

17 database and output at least some of said information via a network for use by bill
18 payers.

1 2. (Previously presented): The system according to Claim 1, wherein said parsing
2 functionality is adapted to parse data from a print stream of data provided by said
3 plurality of billers.

1 3. (Previously presented): The system according to Claim 1, wherein said parsing
2 functionality is adapted to parse data from a data interchange stream of data
3 provided by said plurality of billers.

1 4. (Previously presented): The system according to Claim 1, wherein said parsing
2 functionality is adapted to parse data from a financial data stream provided by said
3 plurality of billers.

1 5. (Previously presented): The system according to Claim 1, wherein said
2 presentation functionality is adapted to output information for use by said bill
3 payers using financial software.

1 6. (Previously presented): The system according to Claim 1, wherein said
2 presentation functionality is adapted to output information for use by said bill
3 payers not using financial software.

1 7. (Previously presented): The system according to Claim 6, wherein said

2 presentation functionality is adapted to output information for use by said bill
3 payers using a browser.

1 8. (Previously presented): The system according to Claim 1, wherein said
2 presentation functionality employs style sheet functionality in order to render
3 information in a form suitable for said bill payers.

1 9. (Previously presented): The system according to Claim 6, wherein information
2 is provided to said bill payers using markup language.

1 10. (Previously presented): The system according to Claim 1, further comprising
2 an interactivity functionality adapted to detect and respond to communications
3 from said bill payers by at least (i) retrieving information from said database and
4 presenting it to said bill payers in a form requested by said bill payers; and (ii)
5 altering information in said database corresponding to said bill payers according to
6 said communications.

1 11. (Currently amended): The system according to Claim 1, further comprising an
2 interactivity functionality adapted to detect and respond to communications from
3 said plurality of billers by at least retrieving from said database information
4 corresponding to said plurality of billers and presenting it to said plurality of
5 billers in a form requested by said plurality of billers.

1 12. (cancelled)

1 13. (Previously presented): The system according to Claim 1, further comprising a
2 biller interface coupled to said database adapted to allow said plurality of billers to
3 alter appearance and content of bills presented to said bill payers, said biller
4 interface allowing said plurality of billers to communicate with said bill payers
5 regarding said bills.

1 (14-16. (canceled))

1 17. (Previously presented): The system according to Claim 1, further comprising a
2 financial source interface adapted to send and receive communications to and from
3 at least one financial entity and to alter information in said database according to
4 said financial source communications.

1 (18-20. (canceled))

1 21. (Currently amended): A method of providing electronic bill presentment and
2 payment services, said method comprising the steps of:
3 extracting relevant information from electronic billing data, corresponding
4 to a plurality of data types, from a plurality of billers using a rules application
5 process, wherein said rules application process is adapted to parse said electronic
6 billing data;
7 transforming said relevant information extracted from all of said plurality
8 of billers into a common document model, which common document model is

9 adapted to accommodate said relevant information from said plurality of billers
10 and according to said plurality of data types, wherein each of said plurality of
11 billers has a subset of data and attributes accommodated by said common
12 document model;

13 storing said transformed information from said common document model
14 in a computer database; and

15 retrieving said transformed information from said computer database and
16 outputting at least some of said information via a network for use by bill payers.

1 22. (Previously presented): The method of Claim 21, wherein said billing data is
2 extracted from a print stream of data provided by said plurality of billers.

3 23. (Previously presented): The method of claim 21, wherein said billing data is
4 extracted from a data interchange stream of data provided by said plurality of
5 billers.

6 24. (Previously presented): The method of Claim 21, wherein said billing data is
7 extracted from a financial data stream provided by said plurality of billers.

8 25. (Previously presented): The method of Claim 21, wherein said at least some of
9 said information is output for use by said bill payers using financial software.

10 26. (Previously presented): The method of Claim 21, wherein said at least some of
11 said information is output for use by said bill payers not using financial software.

1 27. (Previously presented): The method of Claim 21, wherein said at least some of
2 said information is output for use by said bill payers using a browser.

1 28. (Previously presented): The method of Claim 21, wherein said at least some of
2 said information is output using style sheet functionality in order to render
3 information in a form suitable for said bill payers.

1 29. (Previously presented): The method of Claim 26, wherein said at least some of
2 said information is provided to said bill payers using markup language.

1 30. (Previously presented): The method of Claim 21, further comprising the step
2 of detecting and responding to communications from bill payers by at least (i)
3 retrieving information from said database and presenting it to said bill payers in a
4 form requested by said bill payers and (ii) altering information in said database
5 corresponding to said bill payers according to said communications.

1 31. (Previously presented): The method of Claim 21, further comprising the step
2 of detecting and responding to communications from said plurality of billers by at
3 least retrieving from said database information corresponding to said plurality of
4 billers and presenting it to said plurality of billers in a form requested by said
5 plurality of billers.

1 32. (Previously presented): The method of Claim 21, further comprising the step

2 of allowing said plurality of billers to alter appearance and content of bills
3 presented to said bill payers.

1 33. (Previously presented): The method of Claim 32, further comprising the step
2 of allowing said plurality of billers to communicate with said bill payers
3 regarding said bills.

1 34. (Previously presented): The method of Claim 21, further comprising the step
2 of sending and receiving communications to and from at least one financial entity
3 and altering and storing information according to said communications.

1 35-37. (canceled)

1 38. (Currently amended): An electronic bill presentment and payment system for
2 presenting and paying bills via the Internet, said system comprising:

3 an extractor functionality which is adapted to parse billing data from a
4 plurality of billers using rules of conversion according to which the extractor
5 functionality is programmed, corresponding to a plurality of data types, and to
6 provide relevant information, said rules of conversion being a rules application
7 process, allowing a user to generate a translator for parsing the billing data into a
8 common document tree;

9 a common document model processing functionality adapted to transform
10 said relevant information parsed from all of said plurality of billers into a common

11 document model, said common document model adapted to accommodate said
12 relevant information from said plurality of billers and according to said plurality of
13 data types, wherein each of said plurality of billers has a subset of data and
14 attributes accommodated by said common document model, wherein said common
15 document tree contains data and attributes which are mapped into nodes which fit
16 said common document model for storage;

17 a database adapted to store said transformed information from said common
18 document model processing functionality;

19 presentation functionality adapted to retrieve information from
20 said database and output at least some of said information via a network for use by
21 bill payers; and

22 a bill payer interface coupled to said database adapted to allow said bill
23 payers to pay bills electronically.

1 39. (Previously presented): The system of Claim 38, wherein said interface is
2 adapted to allow said bill payers to specify the location of said output.

1 40. (Currently amended): An electronic bill presentment and payment system for
2 presenting and paying bills via the Internet, said system comprising:

3 parsing functionality which is adapted to parse billing data from a plurality
4 of billers using rules of conversion according to which the parsing functionality is
5 programmed, corresponding to a plurality of data types, and to provide relevant

6 information, said rules of conversion being a rules application process, allowing a
7 user to generate a translator for parsing the billing data into a common document
8 tree;

9 a common document model processing functionality adapted to transform
10 said relevant information parsed from all of said plurality of billers into a common
11 document model, said common document model adapted to accommodate said
12 relevant information from said plurality of billers and according to said plurality of
13 data types, wherein each of said plurality of billers has a subset of data and
14 attributes accommodated by said common document model ~~wherein said common~~
15 ~~document tree contains data and attributes which are mapped into nodes which fit~~
16 ~~said common document model for storage;~~

17 a database adapted to store said transformed information from said common
18 document model processing functionality;

19 a presentation functionality adapted to retrieve information from said
20 database and output at least some of said information via a network for use by bill
21 payers; and

22 a biller interface coupled to said database adapted to allow said plurality of
23 billers to identify market segments of said bill payers according to market rules
24 and information retrieved from said database.

1 41. (Previously presented): A system according to Claim 40, wherein said biller

2 interface is further adapted to allow said plurality of billers to alter appearance and
3 content of bills presented to said bill payers based on said market segments.

1 42. (Previously presented): A system according to Claim 40, wherein said biller
2 interface is further adapted to allow said plurality of billers to send marketing
3 messages to said bill payers based on said market segments.

1 43. (Previously presented): A system according to Claim 40, wherein said biller
2 interface is further adapted to allow said plurality of billers to communicate with
3 said bill payers based on said market segments.

EI 1 ~~44-46. (canceled)~~

1 47. (Currently amended): An electronic bill presentment and payment system for
2 presenting and paying bills via the Internet, said system comprising:

3 parsing functionality which is adapted to parse billing data from a plurality
4 of billers using rules of conversion according to which the parsing functionality is
5 programmed, corresponding to a plurality of data types, and to provide relevant
6 information, said rules of conversion being a rules application process, allowing a
7 user to generate a translator for parsing the billing data into a common document
8 tree;

9 a common document model processing functionality adapted to transform
10 said relevant information parsed from all of said plurality of billers into a common

11 document model, said common document model adapted to accommodate relevant
12 information from said plurality of billers and according to said plurality of data
13 types, wherein each of said plurality of billers has a subset of data and attributes
14 accommodated by said common document model~~wherein said common document~~
15 ~~tree contains data and attributes which are mapped into nodes which fit said~~
16 ~~common document model for storage;~~

17 a database adapted to store said transformed information from said common
18 document model processing functionality;

19 a presentation functionality adapted to retrieve information from said
20 database and output at least some of said information via a network for use by bill
21 payers; and

22 an agent interface coupled to said database adapted to allow a plurality of
23 agents having agency relationships with said plurality of billers to communicate
24 with said bill payers regarding bills.

1 48. (Previously presented): A system according to Claim 47, wherein said
2 plurality of agents interface is further adapted to allow said plurality of agents to
3 communicate with said plurality of billers regarding said bills of said bill payers.

1 49. (Currently amended): An electronic bill presentment and payment system for
2 presenting and paying bills via the Internet, said system comprising:

3 parsing functionality which is adapted to parse billing data from a plurality

4 of billers using rules of conversion according to which the parsing functionality is
5 programmed, corresponding to a plurality of data types, and to provide relevant
6 information, said rules of conversion being a rules application process, allowing a
7 user to generate a translator for parsing the billing data into a common document
8 tree;

9 a common document model processing functionality adapted to transform
10 said relevant information parsed from all of said plurality of billers into a common
11 document model, said common document model adapted to accommodate relevant
12 information from said plurality of billers and according to said plurality of data

EI 13 types, wherein each of said plurality of billers has a subset of data and attributes
14 accommodated by said common document model ~~wherein said common document~~
15 ~~tree contains data and attributes which are mapped into nodes which fit said~~
16 ~~common document model for storage;~~

17 a database adapted to store said transformed information from said common
18 document model processing functionality;

19 a presentation functionality adapted to retrieve information from said
20 database and output at least some of said information via a network for use by bill
21 payers;

22 bill payer interactivity functionality adapted to detect and respond to
23 communications from said bill payers by at least retrieving from said database
24 information corresponding to said bill payers and presenting said information to

25 said bill payers in a form requested by said bill payers; and
26 biller interactivity functionality adapted to detect and respond to
27 communications from said plurality of billers by at least retrieving from said
28 database information corresponding to said plurality of billers and presenting said
29 information to said plurality of billers in a form requested by said plurality of
30 billers.

1 50. (Previously presented): A system according to Claim 49, wherein said biller
2 interactivity functionality and said bill payer interactivity functionality are further
3 adapted to present substantially the same information to said plurality of billers
4 and said bill payers in order to allow said plurality of billers to interact with said
5 bill payers regarding said same information.

1 51. (Currently amended): An electronic bill presentment and payment system for
2 presenting and paying bills via the Internet, said system comprising:

3 a modularized input processing engine, said input processing engine
4 adapted to preprocess billing data from a plurality of billers corresponding to a
5 plurality of data types;

6 a parsing engine including parsing functionality which is adapted to parse
7 said preprocessed billing data from a plurality of billers using rules of conversion
8 according to which said parsing functionality is programmed, said billing data
9 corresponding to said plurality of data types, and to provide relevant information

10 for further use by said system;

11 a common document model processing functionality adapted to

12 transform said relevant information parsed from all of said plurality of billers into

13 a common document model, said common document model adapted to

14 accommodate relevant information from said plurality of billers and according to

15 said plurality of data types, wherein each of said plurality of billers has a subset of

16 data and attributes accommodated by said common document model;


17 a database adapted to store said transformed information from

18 said common document model processing functionality; and

19 a presentation functionality adapted to retrieve information

20 from said database and output at least some of said information via a network for

21 use by bill payers.



1 52. (Previously presented): The system according to Claim 51, further comprising

2 an interactivity functionality adapted to detect and respond to communications

3 from said bill payers by at least (i) retrieving information from said database and

4 presenting it to said bill payers in a form requested by said bill payers; and (ii)

5 altering information in said database corresponding to said bill payers according to

6 said communications.

1 53. (Previously presented): The system according to Claim 51, further comprising

2 a financial source interface adapted to send and receive communications to and

3 from at least one financial entity and to alter information in said database
4 according to said financial source communications.

1 54. (Previously presented): The system according to Claim 51, further comprising
2 a financial source interface adapted to send and receive communications to and
3 from at least one financial entity based at least in part on communications from
4 said bill payers and to alter information in said database corresponding to said bills
5 of said payers, according at least in part to said financial source communications.

1 55. (Previously presented): The system according to Claim 51, further comprising
2 an interactivity functionality adapted to detect and respond to communications
3 from said plurality of billers by at least (i) retrieving information from said
4 database and presenting it to said plurality of billers in a form requested by said
5 plurality of billers and (ii) altering information in said database corresponding to
6 said plurality of billers according to said communications.

1 56. (cancelled)

1 57. (Previously presented): The system according to Claim 51, further comprising
2 a biller interface coupled to said database adapted to allow said plurality of billers
3 to identify market segments of said bill payers according to market rules and
4 information retrieved from said database.

1 58. (Previously presented): The system according to Claim 51, further comprising

2 an interactivity functionality adapted to detect and respond to communications
3 from said plurality of billers regarding market segments of said bill payers by
4 retrieving information from said database and altering appearance and content of
5 bills presented to said bill payers based on said communications.

1 59. (Previously presented): The system according to Claim 51,, further
2 comprising an interactivity functionality adapted to detect and respond to
3 communications from said plurality of billers regarding market segments of said
4 bill payers by retrieving information from said database and sending marketing
5 messages to said bill payers based on said communications.

1 60. (Previously presented): The system according to Claim 51, further comprising
2 an agent interface coupled to said database adapted to allow a plurality of agents
3 having agency relationships with said plurality of billers to communicate with said
4 bill payers regarding bills.

1 61. (cancelled)

1 62. (Currently amended): A method of providing electronic bill presentment and
2 payment services, said method comprising the steps of:

3 modularizing a preprocessing of electronic billing data from a plurality of
4 billers corresponding to a plurality of data types;
5 extracting relevant information from said electronic billing data,

6 corresponding to said plurality of data types, from said plurality of billers using a
7 rules application process, wherein said rules application process is adapted to
8 parse said electronic billing data;

9 transforming said relevant information extracted from all of said plurality
10 of billers into a common document model, said common document model is
11 adapted to accommodate said relevant information from said plurality of billers
12 and according to said plurality of data types, wherein each of said plurality of
13 billers has a subset of data and attributes accommodated by said common
14 document model;

15 storing said transformed information from said common
16 document model in a computer database; and

17 retrieving said transformed information from said computer database and
18 outputting at least some of said information via a network for use by bill payers.

63. (Previously presented): The method of Claim 62, wherein said billing data is
2 extracted from a print stream of data provided by said plurality of billers.

1 64. (Previously presented): The method of Claim 62, wherein said billing data is
2 extracted from a data interchange stream of data provided by said plurality of
3 billers.

1 65. (Previously presented): The method of Claim 62, wherein said billing data is
2 extracted from a financial data stream provided by said plurality of billers.

1 66-70. (Canceled)

1 71. (Currently amended): An electronic bill presentment and payment system for
2 presenting and paying bills via the Internet, said system comprising:

3 a modularized input processing engine, wherein said input processing
4 engine is adapted to preprocess billing data from a plurality of billers, said input
5 processing engine including a parsing functionality adapted to parse said billing
6 data from said plurality of billers using rules of conversion according to which the
7 parsing functionality is programmed, corresponding to a plurality of data types,
8 and to provide relevant information, said rules of conversion being a rules
9 application process, allowing a user to generate a translator for parsing the billing
10 data into a common document tree;

11 a common document model processing functionality adapted to transform
12 said relevant information parsed from all of said plurality of billers into a common
13 document model, said common document model adapted to accommodate said
14 relevant information from said plurality of billers and according to said plurality of
15 data types, wherein each of said plurality of billers has a subset of data and
16 attributes accommodated by said common document model ~~wherein said common~~

17 ~~document tree contains data and attributes which are mapped into nodes which fit~~
18 ~~said common document model for storage;~~
19 a database adapted to store said transformed information from said common
20 document model processing functionality;
21 presentation functionality adapted to retrieve information from said
22 database and output at least some of said information via a network for use by bill
23 payers;
24 bill payer interactivity functionality adapted to detect and respond to
25 communications from said bill payers by at least retrieving from said database
26 information corresponding to said bill payers and presenting said information to
27 said bill payers in a form requested by said bill payers; and
28 biller interactivity functionality adapted to detect and respond to
29 communications from said plurality of billers by at least retrieving from said
30 database information corresponding to said plurality of billers and presenting said
31 information to said plurality of billers in a form requested by said plurality of
32 billers.

1 72. (Previously presented): The system according to Claim 71, further comprising
2 an interactivity functionality adapted to detect and respond to communications
3 from said bill payers by at least (i) retrieving information from said database and
4 presenting it to said bill payers in a form requested by said bill payers; and (ii)

5 altering information in said database corresponding to said bill payers according to
6 said communications.

1 73. (Previously presented): The system according to Claim 71, further comprising
2 a financial source interface adapted to send and receive communications to and
3 from at least one financial entity and to alter information in said database
4 according to said financial source communications.

1 74. (Previously presented): The system according to Claim 71, further comprising
2 a financial source interface adapted to send and receive communications to and
3 from at least one financial entity based at least in part on communications from
4 said bill payers and to alter information in said database corresponding to said bills
5 of said payers, according at least in part to said financial source communications.

E 1 75. (Previously presented): The system according to Claim 71, further comprising
2 an interactivity functionality adapted to detect and respond to communications
3 from said plurality of billers by at least (i) retrieving information from said
4 database and presenting it to said plurality of billers in a form requested by said
5 plurality of billers and (ii) altering information in said database corresponding to
6 said plurality of billers according to said communications.

1 76. (Previously presented): The system according to Claim 71, further comprising
2 an interactivity functionality adapted to send and receive communications to and

3 from at least one financial entity based at least in part on communications from
4 said bill payers and to alter information in said database corresponding to said bills
5 of said bill payers, according at least in part to said communications.

1 77. (Previously presented): The system according to Claim 71, further comprising
2 a biller interface coupled to said database adapted to allow said plurality of billers
3 to identify market segments of said bill payers according to market rules and
4 information retrieved from said database.

1 78. (Previously presented): The system according to Claim 71, further comprising
2 an interactivity functionality adapted to detect and respond to communications
3 from said plurality of billers regarding market segments of said bill payers by
4 retrieving information from said database and altering appearance and content of
5 bills presented to said bill payers based on said communications.

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1 79. (Previously presented): The system according to Claim 71, further comprising
2 an interactivity functionality adapted to detect and respond to communications
3 from said plurality of billers regarding market segments of said bill payers by
4 retrieving information from said database and sending marketing messages to said
5 bill payers based on said communications.

1 80. (Previously presented): The system according to Claim 71, further comprising
2 an agent interface coupled to said database adapted to allow a plurality of agents

- 3 having agency relationships with said plurality of billers to communicate with said
- 4 bill payers regarding bills.

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- 1 81. (Previously presented): The system according to Claim 71, further comprising
 - 2 a control functionality adapted to allow said plurality of billers to control at least
 - 3 one of said parsing functionality, said common document model functionality,
 - 4 said database functionality, and said presentation functionality.
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